

# 1N5815

# **Fast Recovery Diode**

### FEATURES

- · High surge current capability
- · Standard polarity: stud is cathode
- · Designed and qualified for industrial and consumer level
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

#### **APPLICATIONS**

- Battery charges
- Converters
- Power supplies
- · Machine tool controls

## **ABSOLUTE MAXIMUM RATINGS**

SYMBOL	PARAMETER	CONDITIONS		VALUE	UNIT
V <sub>RRM</sub>	Repetitive Peak Reverse Voltage			125	V
I <sub>F(AV)</sub>	Average Forward Current	Tc=100°C		20	A
	Surge Forward Current	t=10ms	No voltage reapplied	356	- A
		t=8.3ms		373	
IFSM		t=10ms	100%V <sub>RRM</sub> reapplied	300	
		t=8.3ms		315	
TJ	Junction Temperature		•	-65~175	°C
T <sub>stg</sub>	Storage Temperature Range			-65~200	°C



# **Fast Recovery Diode**

## THERMAL CHARACTERISTICS

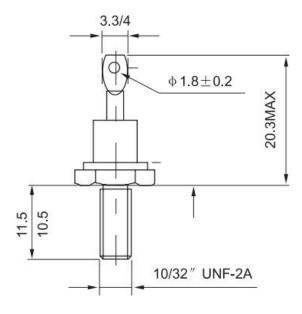
SYMBOL	PARAMETER	МАХ	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case, DC operation	1.5	°C/W

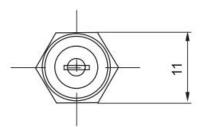
#### ELECTRICAL CHARACTERISTICS

SYMBOL	PARAMETER	ETER CONDITIONS		UNIT
VF	Forward Voltage drop	I <sub>F(pk)</sub> = 10A, T <sub>J</sub> = 25°C, t <sub>p</sub> =400μs	0.89	V

#### PACKAGE OUTLINE

Dimensions in mm (1mm = 0.0394")





For metric devices:M5×0.8

Case Style DO-4

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